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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,378	02/07/2001	Debra L. Biebesheimer	14069(YOR920000766US1)	6851

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EXAMINER

WOO, ISAAC M

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 08/04/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/778,378

Applicant(s)

BIEBESHEIMER ET AL.

Examiner

Isaac M Woo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to Applicant's amendments, filed on May 20, 2003 have been considered but are deemed moot in view of new ground of rejections below.
2. Claims 1-6, 10-15 and 19-24 are amended and claims 1-24 are pending.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chidlovskii et al (U.S. Patent No. 6,327,590, hereinafter, "Chidlovskii").

With respect to claims 1, 10 and 19, Chidlovskii discloses the system, method and program storage device readable by machine embodying a program of instructions executable by machine to perform for classifying user contexts (col. 6, lines 16-27) in a customer self service system that performs resource search and selection, the customer self service system including a context attribute database (user profile and community

profile, FIG. 2, col. 4, lines 16-54) comprising types of user contexts and one or more context attributes associated with each user context for processing by the system, and context attribute function database comprising functions for computing values for each context attribute, see (FIG. 2, col. 6, lines 16-58, the context of community and specific domain), receiving a user query (102, FIG. 2, col. 4, lines 16-40) and context vector (FIG. 2, col. 5, lines 41-67 to col. 6, lines 1-15) comprising data associating an interaction state with the user (50, user profile, FIG. 2) and including context that is a function of user, see (user context profile that has user record contexts based on user and community, col. 4, lines 16-65); processing the query and context vector against data included in a context attribute database (50, user profile, FIG. 2, col. 5, lines 41-67) comprising types of user contexts and one or more context attributes associated with each user context (user context profile, col. 56-67) for processing by the system, see (FIG. 2, col. 4, lines 16-67 to col. 5, lines 1-67); and processing the query and context vector against data included in a context attribute function database (user profile) comprising functions for computing values for each context attribute, wherein the processing results in predicting a particular user context and populating the user context vector with context parameters specifying, (col. 8, lines 35-55) a user interaction state, see (col. 8, lines 35-55, FIG. 2, col. 2, lines 34-67, col. 4, lines 16-67). Chidlovskii discloses the processing and populating user context vector (col. 6, lines 5-59, term-weight vector of user context profile). Chidlovskii does not explicitly disclose "for use in a subsequent resource search". However, Chidlovskii discloses pre-processor creates user query profile (5, lines 42-67) and used by the search post-processor later, which

teaches that the results from pre-processor is used for later queries (subsequent search, see col. 8, lines 35-46). Therefore, it would have been obvious a person having ordinary skill in the art the invention was made to include "for use in a subsequent resource search" in the system of Chidlovskii to get refined query input from pre-processor for the second search query. Because the refined or augmented search query provides more accurate data search results in database search system.

With respect to claims 2, 11 and 20, Chidlovskii discloses the applying the functions to context for specifying the user interaction state (50, user profile, FIG. 2, including context that is a function of the user (user context profile, col. 5, lines 42-67), and annotating the context vector with a set of context parameters for use in subsequent processing, see (col. 8, lines 35-55, FIG. 2, col. 2, lines 34-67, col. 4, lines 16-67).

With respect to claims 3, 12 and 21, Chidlovskii discloses, implementing a supervised learning algorithm for predicting the user contexts, see (col. 5, lines 42-67 to col. 6, lines 1-27).

With respect to claims 4, 13 and 22, Chidlovskii discloses, updating the attribute value functions database with more enhanced functions, see (col.3, lines 7-23).

With respect to claims 5, 14 and 23, Chidlovskii discloses, analyzing historical user interaction data from a user interaction database (user profile, FIG. 2) comprising data relating to past user queries entered into the system (user query, 102, FIG. 2) and associated user contexts for particular users, see (col. 5, lines 33-67); and mapping user context attribute values to user context attribute functions, data from the user records database (user profile, FIG. 2) serving as a training set for supervised learning to enable continuous improvement of the functions in the context attribute function database, see (col. 5, lines 42-67 to col. 6, lines 1-59, user query searching user and community profile to get context attributes by pre-processor).

With respect to claims 6, 15 and 24, Chidlovskii discloses, that the user interaction data includes data relating to previous system interactions, the data including user validated user contexts that were applicable during the system interactions, and the users responses relating to those interactions, see (col. 5, lines 42-67 to col. 6, lines 1-27).

With respect to claims 7 and 16, Chidlovskii discloses, that the prior transactions of a current user and prior transactions of other similar users, wherein common behaviors and acceptance criteria are determined for the updating the functions, see (col. 5, lines 42-67 to col. 6, lines 1-27).

With respect to claims 8 and 17, Chidlovskii discloses, that similar users comprise those users with shared organization, community or environmental characteristics, see (col. 5, lines 42-67 to col. 6, lines 1-27).

With respect to claims 9 and 18, Chidlovskii discloses, updating mechanism provides additions and modifications to a set of context attribute functions resulting in increasing ability to predict derived contexts as functions of the raw contexts, see (col. 3, lines 7-55).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wong et al (U.S. Patent No. 6,578,037) discloses the system for providing the ability to define a user context attribute and what user context attribute specifies a policy group for a particular database schema object, the database administrator may create and designate a particular context attribute that is used to identify policy groups for a set of schema objects. The manipulation of user context attributes can be used as 103 reference.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



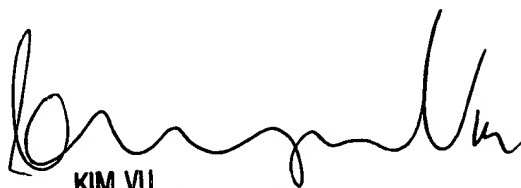
**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW  
July 28, 2003

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100